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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,928

10/17/2005

Michael Kirst

KIRS3001/FJD

1895

23364

7590

10/25/2006

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EXAMINER

LAU, TUNG S

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/523,928	Applicant(s) KIRST, MICHAEL	
	Examiner Tung S. Lau	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary Amendment

1. Preliminary Amendment filed on 10/17/2005 are noted by the examiner.

Specification objections

2. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited See 37 CFR 1.72(b) and MPEP § 608.01(b). The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," "means" and "said," etc, should be avoided

'Comprises' is an improper legal phraseology often used in patent claims and should be avoided. (MPEP 608.01(b) [R-3])

Drawings Objection

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3. The drawings are objected to under 37 CFR 1.84 (o)(n) which requires legends on drawings in figures 1 generic blocks 8, 5, 6, 4, 12, 3, 11, 2 and 10, in fig. 2, generic blocks 8, 7, 12, 5, 4, 3, 9, 2 and 10. Should be provided with descriptive labels (e.g. software protocol, transmitter, frequency hopper, receiver, etc), correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13-22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Fleckner et al. (U.S. Patent Application Publication 2004/0086768, filed on Aug. 18, 2000).

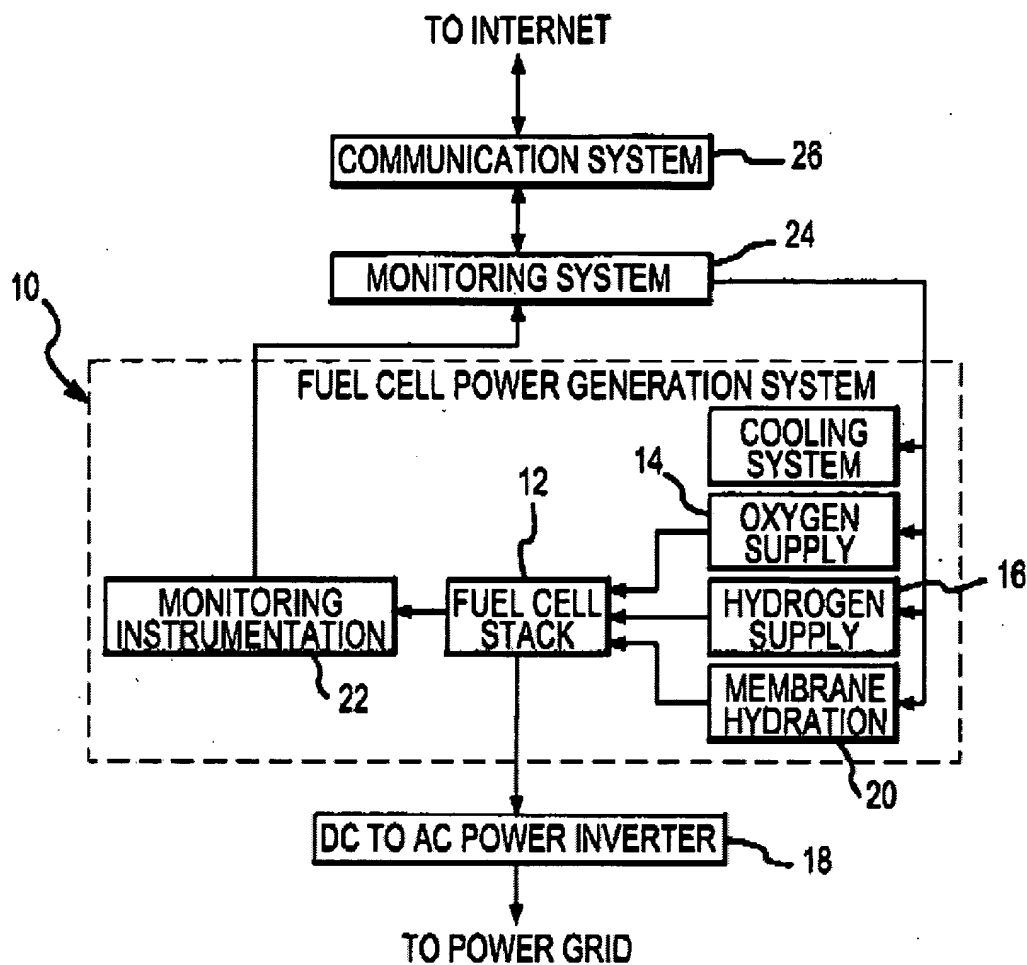
Regarding claim 13:

Fleckner described an apparatus for determining and/or monitoring a physical or chemical variable in a process (fig. 1, unit 24), comprising: a remote control station (fig. 1, unit 26, page 3, section 0035); data connection (fig. 10, unit 174); at least one field device (fig. 9, fuel cell monitoring section), said at least one field device exchanges data with said remote control station via said data connection (fig. 1, unit 26, page 3, section 0035); and at least one fuel cell electrically

connected with said field device (page 6, section 0104, fig. 10, unit 154, 156, 158), wherein: said at least one fuel cell (fig. 10, unit 152) at least partially covers the energy requirement of said field device (fig. 10, unit 152, 156, 158), and said at least one fuel cell is arranged remotely from said field device (page 7, section 0109, fig. 11, network control)).

Regarding claim 14, Fleckner further described data connection between the control station (fig. 1, unit 10) and said at least one field device (fig. 1, unit 12) is accomplished by one of: wirelessly (page 3, section 0035), and via a data line (fig. 10, unit 178).

Regarding claim 15, Fleckner further described multiple field devices are provided (page 6, section 0086, where device in fig. 1, unit 10 are installed in homes to created electricity), which are electrically connected with said at least one fuel cell (fig. 1, unit 12).

**FIG. 1**

Regarding claim 16, Fleckner further described said data connection includes one of: a field bus (fig. 10, unit 178) and a two-wire line (fig. 10, unit 174, page 7, section 0106, connection are in serial, two wires connection in serial configuration, one wire is data, the other is ground reference, fig. 10, unit 178).

Regarding claim 17, Fleckner further described said at least one fuel cell (fig. 10, unit 152) is connected with said at least one field device via one of: said field bus (fig. 10, unit 174, 178), and said two-wire line (fig. 10, unit 174, page 7,

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section 0106, connection are in serial, two wires connection in serial configuration, one wire is data, the other is ground reference, fig. 10, unit 178).

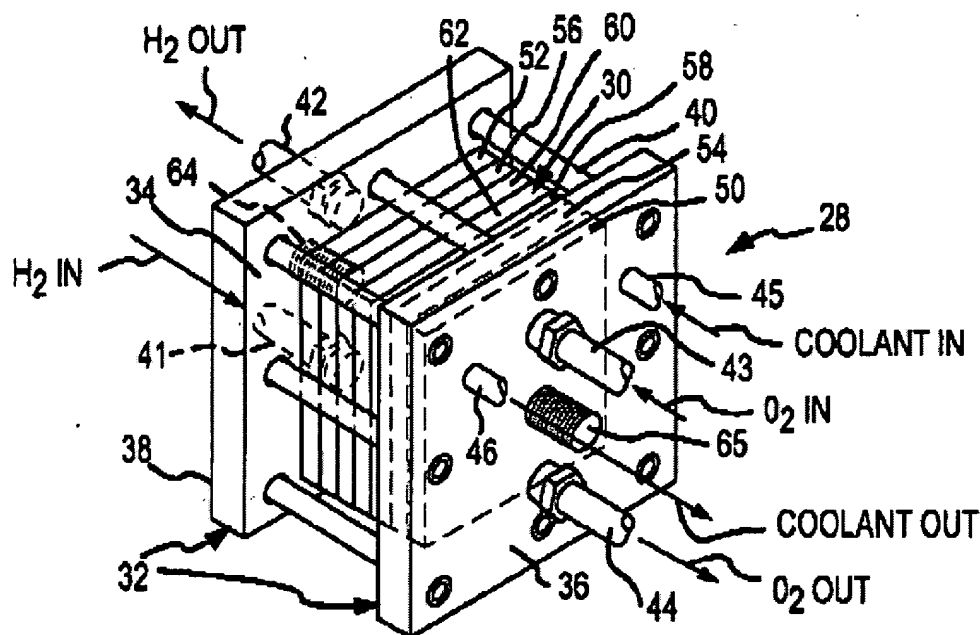


FIG. 2

Regarding claim 18, Fleckner further described said at least one fuel cell (fig. 1, unit 12) is arranged in said control station (fig. 1, unit 10).

Regarding claim 19, Fleckner further described a first field cell and a second field cell are provided (fig. 2, unit 52, 56, 60, 30), and said at least one field device is connected (fig. 10, unit 151), at least at times, with said first fuel cell and said second fuel cell (fig. 2, unit 52, 56, 60, 30).

Regarding claim 20, Fleckner further described said at least one field device is connected, at least at times, with only one (fig. 1, unit 12) of the two fuel cells (page 6, section 0086, where device in fig. 1, unit 10 are installed in homes to created electricity),.

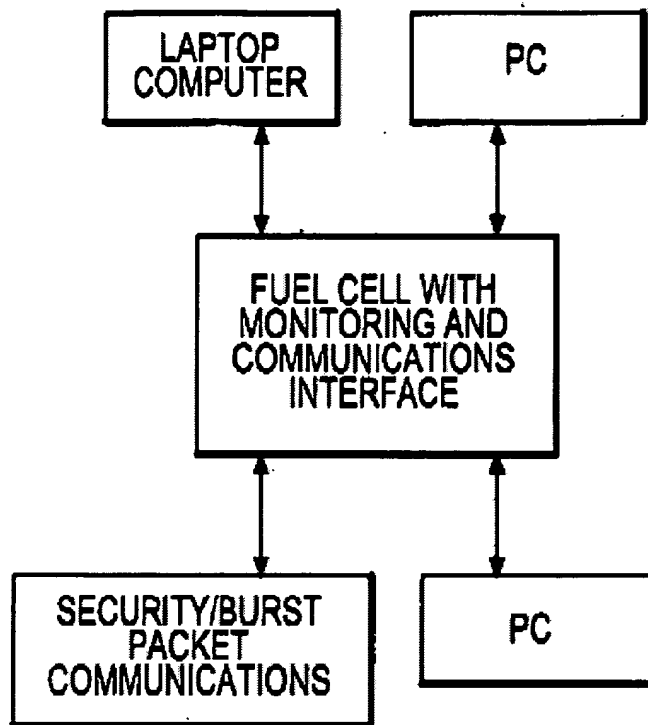


FIG.9

Regarding claim 21, Fleckner further described multiple fuel cells are combined into a fuel cell package (fig. 2, unit 52, 56, 60, 30).

Regarding claim 22, Fleckner further described said at least one field device is positioned in an area where there is danger of explosion (fig. 1 unit 16, where hydrogen is highly flammable).

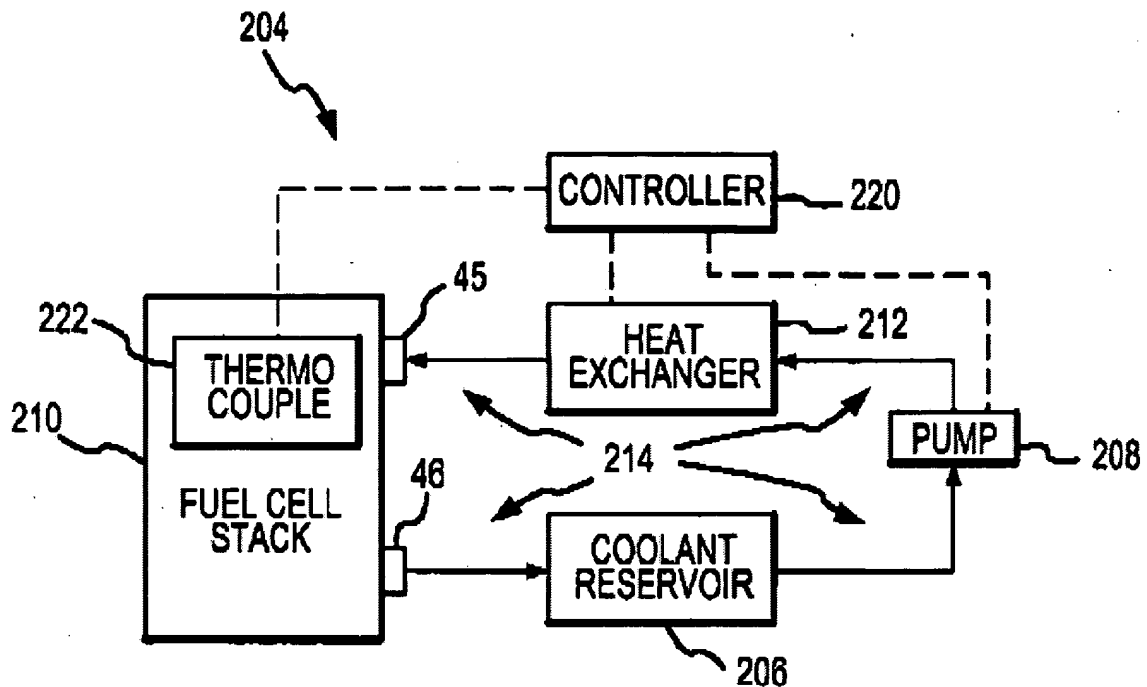


FIG.12

Regarding claim 24, Fleckner further described a fueling unit (fig. 1, unit 14, 16), via which said at least one fuel cell can be fueled (fig. 1, unit 12).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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a. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleckner et al. (U.S. Patent Application Publication 2004/0086768) in view of Welches et al. (U.S. Patent Application Publication 2002/0036430).

Regarding claim 23, Fleckner further described a monitoring unit (fig. 1, unit 10), Fleckner does not described issues a warning/error report as soon as the energy supplied by said at least one fuel cell falls beneath a predetermined limit value. Welches described issues a warning/error report as soon as the energy supplied by said at least one fuel cell falls beneath a predetermined limit value (page 6, section 0088), in order to maintain safety of the entire system (page 6, section 0088).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fleckner to have issues a warning/error report as soon as the energy supplied by said at least one fuel cell falls beneath a predetermined limit value taught by Welches in order to maintain safety of the entire system.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Fleckner and Welches are analogous art because they are from the same field of endeavor, fuel cell power generation and delivering.

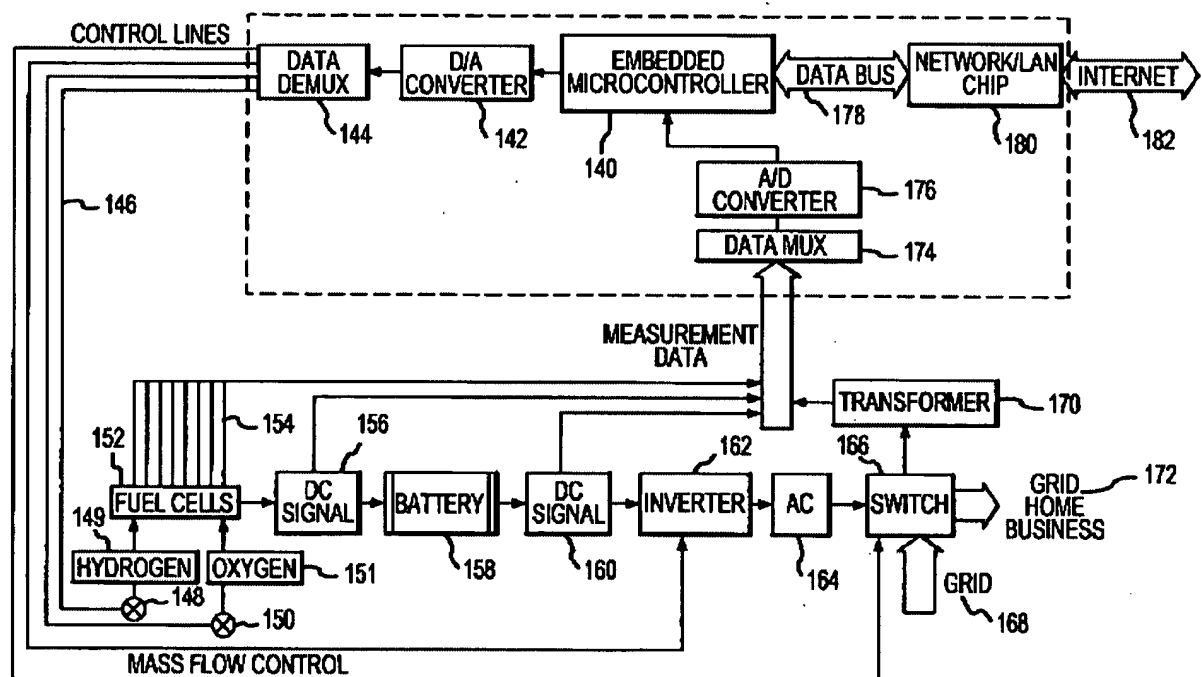


FIG.10

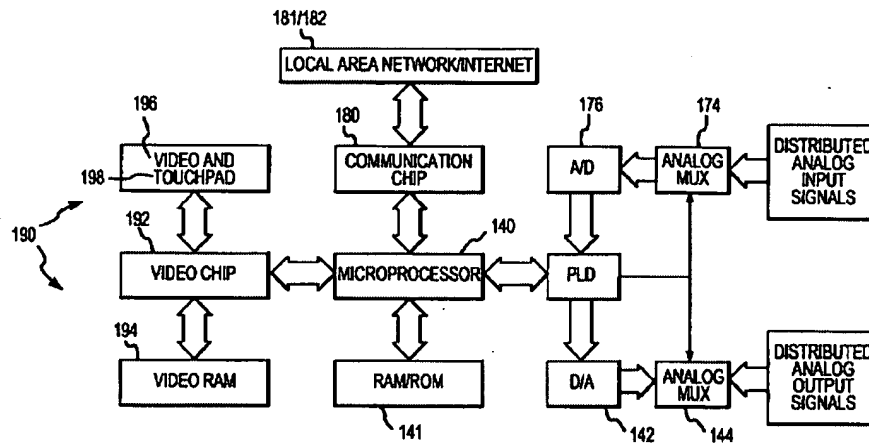


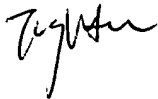
FIG.11

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tung S. Lau

AU 2863, Patent examiner

October 23, 2006